

outside purposes and exposure to the weather. The sixth and lowermost bed of the building-stone is termed the *franc banc*, and has a total depth of from 4 feet 6 inches to 5 feet, but this being, like that of the *gros banc*, an inconvenient depth, it is divided into a lower thickness of 3 feet, and an upper *banquet* of 20 or 24 inches deep. The whole of the stone of these beds is soft and tender in the quarries, and the blocks are extracted with great ease. They are produced of regular size and squareness. When taken to the outside, and exposed to the atmosphere, they gradually part with much of their humidity, and harden; and, if exposed on the quays during winter, they are covered over to protect them from the frost. They saw freely with a common peg-toothed saw, without either sand or water, and are easily worked, for building purposes; and, being of a compact fine grain, they produce very sharp arrises, and receive a very smooth surface on the face.

During the winter little work is done in the quarries in regard to extracting blocks of stone; but the men occupy themselves in sawing and squaring slabs about 12 or 15 inches square, and from an inch to an inch and a half, or more, thick, which are used for paving halls, galleries, and even some rooms inside their buildings. But the most extraordinary use to which I have seen these square slabs applied, was in the church of the Trinity of the Abbaye aux Dames. Two of the openings between the piers have been closed up, for the purpose of some repairs going on. I passed through a door in the partition or inclosure, both of which appeared to me of the same thickness. My surprise was great, and I examined the edge of opening, and found it of stone, and discovered, upon closer inspection, that the opening, about 10 feet wide by 20 feet high, was inclosed by these square thin slabs, about an inch and a half thick, placed on edge, put together with plaster, sufficiently stable to allow a door to work in its aperture. I subsequently was told, upon inquiry, that the inside partition in rooms, 10 feet high, are formed of the same material, and secured by occasional upright studs, 10 feet apart. These partitions are admirable, for they are very light, occupy little space, and form an excellent ground to receive the plastering on the surface.

The general character given of the Caen stone is, that all the beds are of the same quality, and all equally adapted for building purposes; but evidently, from the information which I collected on the spot, and subsequently in London, from Messrs. Liard, there are modifications in each bed, as may be reasonably supposed, and as experience teaches us in the quarries of other oolitic stones in Bath and Portland. Various veins traverse the beds in all directions, and have a white appearance; this white substance is equally hard with the stone itself, and if a stone be laid with its bed parallel with the direction of these veins, it is of little consequence, but they, of course, indicate a certain unsoundness or division in that part; and if the stone be laid with this vein in a vertical direction, the block will run the chance of being fractured by a weight, or, if near the surface, it probably may admit the wet. These veins are not like those in the Bath stones, which are hard, consisting of crystallized carbonate of lime, and running always in a vertical or inclined direction, and not liable to separation. In general, it is considered that the blocks of Caen stone may be placed in construction in any direction, except when the white veins are perceptible. It is said, that the most experienced eye can hardly detect the different qualities of the stone in the block, when once they have been removed from the quarry, as the action of the quarryman's tool on the surface hardly offers any indication; and there is no appreciable difference in the appearance of the granular formation.

There are in the vicinity of Caen, even to a considerable distance, many beautiful varieties of this formation. At Falaise, about 20 miles from Caen, the Orne, is a fine compact stone, harder than the Allemagne. Its texture is equally equal, and fine grained. It is one-third more than that of Caen, and of course the labour upon it is increased. It is well adapted for

exposed situations, and is used, I believe, in the quays and dock basin now constructing at Caen.

I was, of course, anxious to ascertain whether the magnificent and ancient buildings in the city could be relied upon as proofs of the quality of the stone in the Allemagne quarries, of which there is a traditional report handed down from one generation to another, that they are constructed. And, certainly, the lofty pinnacles and spires, and the solid high square towers, which rise up into the clouds, defying the fury of the elements, for many ages exposed to storms, hail, rain, snow, and frost, acted upon by all the alternations of heat and cold, wet and dry, present a sharpness of arris and smoothness of surface, as seen from below, that prove a considerable degree of hardness in the stone of which they are constructed. Less reliance can be placed upon the indications on the parts within reach, for exposed as they have been to the vandal wantonness of the revolutionary phrenzy of destruction and the Calvinistic zeal of misguided religious feelings, there are many of the lower parts broken away and considerably worn. But the attenuated and refined details of some "renaissance" finials, pinnacles, and flying buttresses, in the lady-chapels and apsidal altar-ends of the churches of St. Pierre and St. Sauveur, and St. Sauveur-le-Marché of the beginning of the sixteenth century, more minutely enriched and elaborately carved and subdivided, than even the most refined details of the flamboyant parts near them, are as fresh and sharp as if executed within the last fifty years. Time and weather have not had, on the monuments of Caen, the same corroding hideous influence as on the edifices of Chester, Coventry, or Oxford. The graceful spire of St. Pierre, the summit of which is 250 feet above the market-place, and itself more than 100 feet high, does not appear to be thicker than 9 inches in the lower part, and is reduced, it is said, to 4 inches thick at top. The immense weight and the exposed situation do not seem to have affected it in the least degree; and it may be quoted, if not for size, at all events, for its grace, daring construction, and state of preservation, after 540 years' trial, with its sister spire of our own Salisbury, erected at the same period.

At the same time, I am not prepared to assert whether the stone employed was all taken from the Allemagne, or from some other superior quarries; but the appearance of the stone justifies the tradition of its origin, and I know not how to question it.

Having ventured to trespass so long upon your patience, in offering to you such imperfect information upon a subject of such great practical interest, from the general adoption which this building material is now again assuming, I hardly know how to claim your indulgence and attention for a few minutes longer, while we cast a hurried glance upon the admirable edifices and institutions of this deeply exciting town. I say deeply exciting, for when we remember that our first William and great conqueror, great, let me call him, for he conquered us, to whom we are indebted for the introduction of so many useful arts and refinements, held his ducal seat of government in this city: when we consider the people, whether in their physical development or in their customs and habits of thinking, and recognise so many points of resemblance, both in the character and appearance of the inhabitants, with the English, I must own that I could not but feel a certain sentiment of consanguinity and common origin, that gave a charm and suggestive sentiment to all that I saw;—at every turn throughout Normandy we meet with records of our Williams, our Edwards, and our Henrys. Here have our arms been triumphant—there have our architects erected glorious fanes to the High God; the names of their most impregnable fortresses are associated with our annals, and in its towns have occurred some of the most stirring events recorded in the dramas of our poet of the Avon. Again, I repeat, deeply exciting, in an architectural point of view: for the most experienced of us may, in Caen, study with advantage all the modifications of mediæval art, from the majestic solemnity of its Byzantine type, known to us as the Norman, through the earliest pointed examples, and investigating

the latter profuse development of the Flamboyant, whose wantonness of form and details influenced even the transition details of the "Renaissance," and gave a profuse exuberance of fancy and power, of varied imagination and elegant refinement, that, in the first moment of surprise, a giddy confusion is produced in the mind of the beholder, and he can hardly decide whether the Gothic architecture had become a classic, or the classic had fallen back upon Gothic associations.

I shall follow the classification rather than the position of the buildings, merely mentioning the most prominent;—nor shall I enter into minute details, for which I shall refer you to the admirable work of the lamented Pugin and Le Keux, and, for a general idea of the impressive effect of several interior and exterior views, to the sparkling and simply effective delineations of Cotman, whose eye could seize and pencil reflect the broad and leading points and characteristics of whatever he saw, and which, fortunately, we have on the table before us, through the liberality of our generous friend Mr. Kendall.

The Norman style, which is called by our learned honorary and foreign corresponding member, M. de Caumont—Transition, and by others in France—Romane and Romanesque, has, in Caen, several impressive and beautiful examples. The largest of these is the church of St. Etienne, known also, from its monastic establishment, formerly in connection with it, as the Abbaye aux Hommes.

It was founded by the Conqueror, in 1064, and possibly erected in honour of the glorious kingdom which he had won. The west end consists of two square lofty towers, surmounted by spires, rising to the height of 262 feet. The lower part has three openings, leading into the nave and side aisles, and up to the gable of the roof, presenting a poor and mean appearance, though imposing in size. There are also in this part several fissures and settlements, proving, in this as in too many other buildings of Caen, that haste or want of skill, or absence of foresight, were of too frequent occurrence in this city. From this point commences the glory of the towers—pile rises upon pile, story rises upon story, surmounted by upshooting spires with clusters of tabernacles or pinnacles as the bases, all carrying the eye and the thoughts into the world above, not with the blasphemous pride and impure daring of them of Babel—but with the holy glowing aspirations of the enthusiastic Christian, arising in faith and hope to his God.

The interior, remarkable for the simplicity of its divisions and the sobriety of decorative treatment, is a noble production, consisting of a nave, an aisle on either side, transepts, and apsidal altar-end. There is a groined cylindrical vaulting up to the crux, the springing shafts of the main ribs rising on each alternate pier. This stately feature of the vault, so rare in our large Norman churches, is very imposing in those of Caen. The triforium has a series of arches equal in size to those of the side aisles; and there are curiously divided double openings from the uppermost windows, surmounted by tilted arches, intersecting the intermediate bays of the vaulting. This portion of the chancel has little enrichment on the mouldings, and as far as the transepts the same plain majestic simplicity is preserved. But in the choir a transition takes place, and the more graceful lines, the more frequent mouldings, and the refined enrichments of the lancet give a radiance of beauty to this holy of holies of the Roman Catholic sanctuary. There is something peculiarly attractive in an apsidal termination. Instead of the eye stopping with a harsh abruptness at the end, the sight is carried round and resumes the circuit of the church; and the radiating apertures, with their receding chapels, each with its altar, and incense, and worship, seem a worthy realization and embodiment of the figurative meaning attached to this part of the cross-like form of the plan, as indicating the position of the head of the dying Saviour. I take it in the mystical and emblematic sense given to it by the ecclesiastics of old. I do not judge it as a Protestant, but I look to see, as an artist, whether the idea has been realized; and I feel, as in the church at Caen, that in the apsidal form of the choir end, and in the greater enrichment in the style of the architecture, the architect has realized in its fullest

